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PURCHASINGWORLD VOL. 31, NO. 4 APRIL 1987

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Packaging products that really pack 'em in

Bid system cuts freight costs, improves service

Making the best quantity buy with PCs

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Helping you manage the business of buying

April 1987 Vol. 31 No. 4

Special Report: Office Products

36 Office market is fair game for bargain hunters
The message of this in-depth report on the office products market is clear: If you can't cut a deal, you aren't really trying. Price and demand trends tell the story.

40 In office supplies, it's what you buy and how you buy it
We asked office supplies buyers nationwide how they unravel the mysteries of the supply cabinet. This report shows that it takes real buying savvy to make dollar sense out of all those pens, pencils, and paper clips.

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54 Packaging: products that really pack 'em in
PurchasingWorld pulled it all together for packaging buyers—Here's a roundup of what's new and promising in new packaging innovations.

62 DRI Forecast: Gear up for accelerating inflation
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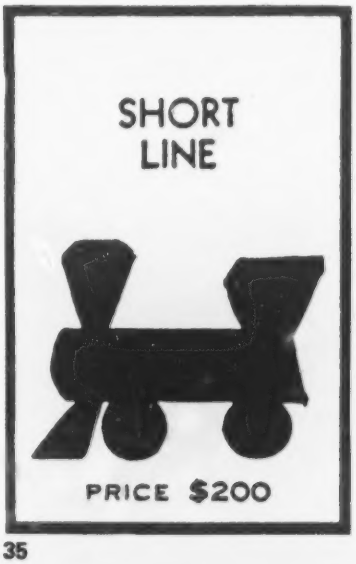
Miss the SAE exhibit or the Spring National Design Engineering Show this year? Fear not, because *PurchasingWorld* walked the shows for you. Here's a sampling of the innovative new products we saw.

100 Enter the 1987 Crystal Ball Competition!!
It's that time again—Get out your crystal balls and see if you can conjure up an accurate forecast for the 1987 economy. Contest details and entry form are here.

Cover design by Bob Moyer, Artist's Studio, Cleveland, OH



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100

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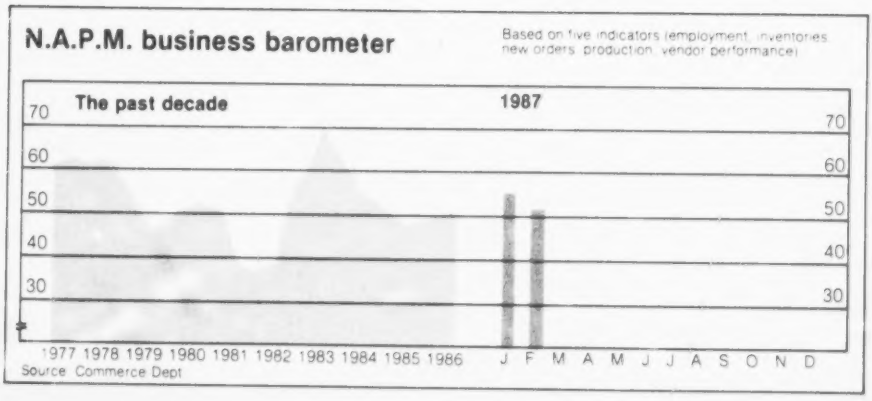
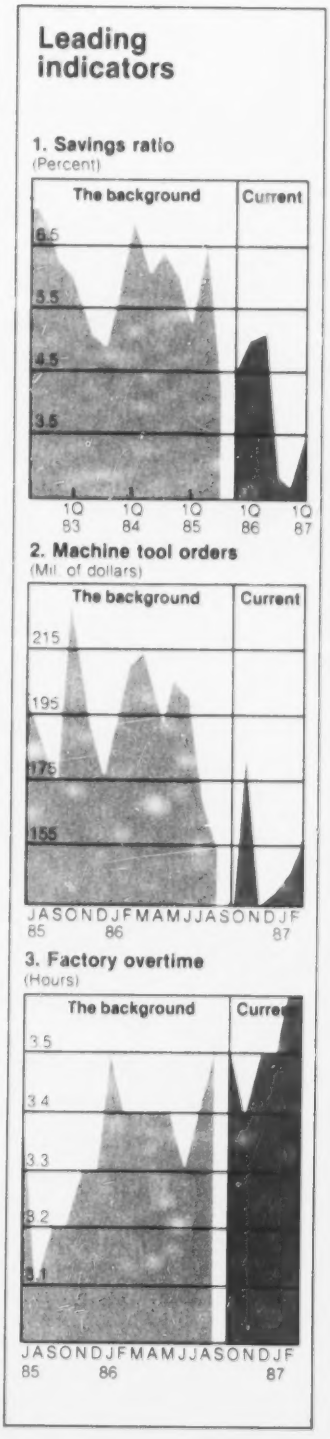
BUSINESS DATATRAK


N.A.P.M. business barometer
Based on five indicators (employment, inventories, new orders, production, vendor performance)
The past decade
1987
70
60
50
40
30
1977 1978 1979 1980 1981 1982 1983 1984 1985 1986
J F M A M J J A S O N D
Source: Commerce Dept



KEY ECONOMIC TRENDS

Where's the beef in this bull market?

The economy continues to edge up but advances are not robust. Average annual rates of gain are only expected to be 2-2.5% over the first two quarters of the year.

Blame the sluggishness on the fact that there is not one big sector to spearhead any significant advance. Thus consumers are taking a breather after their late 1986 buying binge. So are businessmen who beefed up late 1986 orders for capital equipment because of the changing tax laws.

The government is not showing any signs of big new gains, either. Federal spending will be up about 4% this year but that's far below the 7% jump in 1985.

Not surprisingly, most indicators of future activity are just barely in the plus column. The N.A.P.M. Business Barometer, for example, registered only a mildly bullish 51.9 over the latest reported month (50 is neutral). That's well under the 55+ levels that have traditionally indicated a major business pickup.

A closer look at the savings rate (savings as a percent of spendable income) points up the problems in the consumer area. The typical family spent as if there were no tomorrow last fall—the savings rate tumbled to 2.5%. That was one of the lowest figures in history and not sustainable over the long term.

The rate is already beginning to rise (to 3%+—see chart), suggesting that consumers are thinking twice or even three times before making any new big-ticket purchases. This shows up most clearly in the auto sector where first quarter sales came to only 10 million units vs. 13.2 million and 11.5 million units of the third and fourth quarters of 1986, respectively.

About the only consumer sector remaining strong is housing. That's primarily because of falling interest rates which have apparently been important enough to sustain starts at a high 1.8 million annual rate.

This is hardly enough to impact positively on GNP. Reason: Last year's figure was also around 1.8 million units. So it looks like housing will remain a neutral factor.

Fixed costs drive up auto expenses

Owning and driving a new car will cost you 40-63¢/mile, according to Hertz. The new estimates are based on the assumption that the new vehicle will be driven 10,000 miles per year and held for five years.

Subcompacts are cheapest. The 63¢/mile estimate relates to the dwindling

number of standard sized cars that are still being sold. Cost for popular compact models average about 49¢/mile.

The new study also points out that costs vary substantially according to how long the car is kept. So the 49¢/mile compact (5-year possession) rises to 52.7¢/mile for 3-year trade-ins and falls to 42.8¢/mile for a vehicle held seven years.

Similarly, cars driven fewer miles per year cost more. The 49¢/mile cited for a compact driven 10,000 miles per year, for example, rises to 85¢/mile when driven only 5,000 miles but drops to 30.8¢/mile when driven 20,000 miles.

Other key findings of the new Hertz study:

- About 75% of all outlays are for so-called "fixed" expenses such as depreciation, interest, insurance, licenses, taxes, and fees. "Variable" costs (gas, oil, maintenance, repairs, etc.) make up the remaining 25%.
- Fixed costs have risen fastest over the past year because of higher purchase prices and the big jump in insurance premiums. On the other hand, variable costs have actually declined a bit because of lower gasoline tags.
- New cars, at latest report, were being kept an average of 5.2 years vs. 3.6 years 10 years ago. The average age of a vehicle over this same time span rose from 5.7 to 7.6 years.
- Used cars generally cost a lot less because of lower fixed costs. Savings normally run about 20-50%—with an average of 40%.

Price outlook is rosy

Budget for another year of relatively modest price boosts, according to William V. Doll, president of New York's Joint Purchasing Corp.

Doll, who spends about $125 million in annual purchases for health care and other service outfits, sees little on the near-term horizon to suggest any major runups. His current projections are actually more optimistic than the preliminary ones he made for 1987 just a few months ago in *PurchasingWorld.*

Two factors lie behind his current, rosy outlook: 1) oil prices which should not be rising as much as he had originally projected, and 2) the failure of competitive pressures to diminish despite the fact that 1987 marks the fifth consecutive year of general business upturn.

Here's a rundown of some of Doll's more specific forecasts:

- **Office supplies and equipment:** Computer prices should fall 5%. There will be no appreciable change in office supplies. Although paper, printing, and furniture will be rising, none of these categories is expected to rise more than 5%.
- **Engineering and housekeeping:** The outlook here is similar. Only electrical supplies are expected to decline. Nothing else will rise by more than 4%. Plant maintenance supply is expected to go up only 2%.
- **Food:** Last fall's bumper harvest is assuring another low-cost procurement year. The only notable increases are seen for fish (+5%) and citrus juices (+3-8%). But little or no increase is projected for soft drinks, coffee, and tea.

Doll points out that increases could be a bit less than his generalized forecasts indicate for those covered by his Group Purchase Agreements. He also suggests that this is the time to make long-term contracts to take advantage of the low numbers and competition which he feels aren't going to last forever.

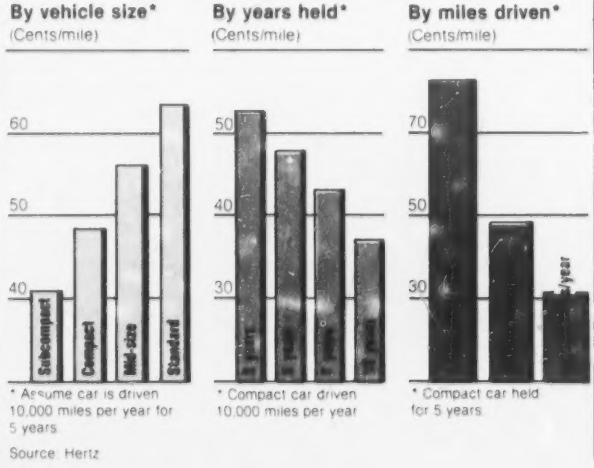
A purchasing-oriented look at 1987 commodity tags

Office supplies & equipment	
Computer	-5%
Fine paper	+5%
Office supplies	0
Furniture	+2-5%
Printing	+3%
Forms	+2-4%
Toners & developers	0
Engineering & housekeeping	
Paper products	+3%
Polyliners	+0-4%
Chemicals & cleaning products	+1%
Fuel oil	+2-5%
Utilities	+2%
Batteries & lamps	0
Plant maintenance supplies	+2%
Paint	+3%
Electrical	-2%
Plumbing	+3%
Food	
Dairy products	
Milk	+3-5%
Cheese	+1-3%
Ice cream	+2-4%
Yogurt	+3%
Bread & fresh baked goods	+2%
Fruits	+0-5%
Vegetables	+0-5%
Citrus juices	+3-8%
Other juices	+0-5%
Oil & shortening	+2%
Fish	+5%
Meat & poultry	
Beef	+0-4%
Pork	+0-5%
Lamb	+0-3%
Veal	+1-4%
Poultry	+1-5%
Eggs	+2%
Other foods	
Dry goods & other products	+3%
Coffee & tea	+0-4%
Soft drinks	0
Sauces, dressings & condiments	+0-3%
Frozen desserts	+0-4%
Dietary supplies	
Paper, film, foil, disposable cups & containers	+3-5%
Cutlery, glassware, china	+5%
Dietary detergents	+0-5%

Source: Joint Purchasing Corporation

How new car costs vary

(Ownership & operating costs)



Source: Hertz

CURRENT PRICES

Prices teeter while energy totters

Industrial producer prices, still feeling the impact of recent energy advances, moved up another 0.7% over the past month. Nevertheless, this bellwether inflation yardstick remains 1% under year-ago levels.

Gains in energy have been fairly pervasive. Solid increases have hit gasoline, home heating oil, diesel fuel, residual fuel, jet fuel, and liquid petroleum gas. Result: The overall energy and fuel index (see chart) rose 3%.

A modest increase was noted in other areas, too. Construction materials, aided by a mild winter, showed broad increases for sand and gravel, plywood, softwood and hardwood lumber, cement, plumbing fixtures, and brass fittings.

Paper is another area with a pronounced upward tilt. Corrugated boxes continued to rise and at latest report were running 10% ahead of a year ago. Also advancing over the last month were paperboard and paper office supplies.

Textiles were buoyant, too—with a big jump coming in grey goods. Increases also hit other product lines such as leather, fertilizers, aircraft parts, and internal combustion engine parts.

Chemical and plastic prices also edged lower. But judging from current industry announcements, both these sectors should be back in the plus column next month.

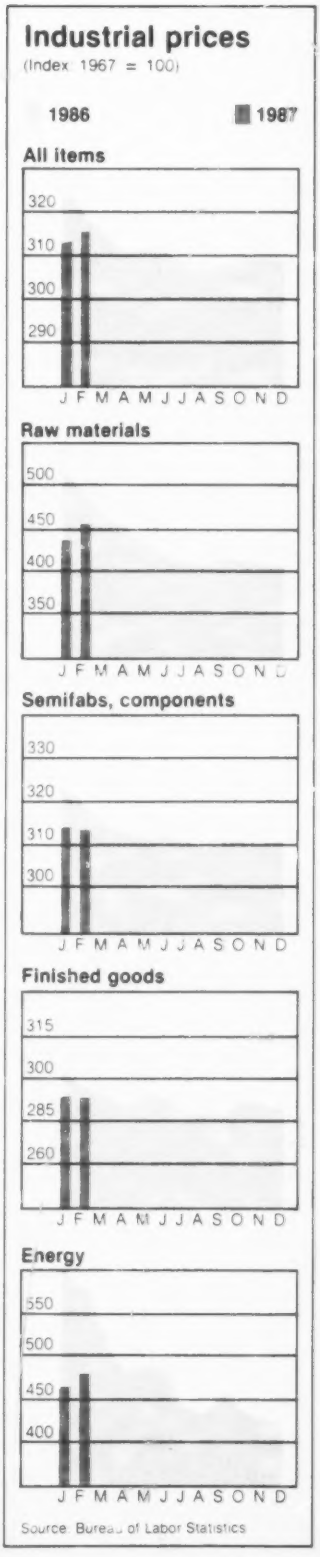
Metals, in the meantime, show little discernible trend. Aluminum rose sharply and steel edged a bit higher, but both lead and zinc tumbled.

Competitive pressures also seemed to surface in the machinery category—with the overall reading for this group off 0.3% over the past 30 days. Sparking the fall were declines in motor vehicles, aircraft, and railroad equipment. On the other hand, both chemical industry machinery and engineering and scientific instruments inched ahead.

Commenting on the overall trend, one government official said he expected the new leveling off in energy to slow down near-term increases. Specifically, he sees 2Q price

This month's breakdown

	Latest level (Feb)	% change from: Month ago	Year ago
Bearings	356.3	0.1	0.8
Bolts, nuts, etc	278.0	0.0	-0.1
Chemicals, inorganic	292.5	0.1	-1.5
Chemicals, organic	334.8	-0.3	-4.8
Concrete products	325.1	0.0	0.0
Corrugated cartons	289.8	2.2	10.1
Cutting tools, small	293.6	-0.3	1.5
Electric lamps (bulbs)	347.8	0.4	-0.8
Electronic components	203.3	0.2	1.7
Fans and blowers	369.9	0.4	0.7
Foundry and forge products	363.0	-0.2	-0.6
Fuel oil (residual)	625.2	18.3	-17.4
Furniture, commercial	323.0	0.1	2.6
Gasoline	368.8	6.2	-22.0
Glass, flat	234.4	0.1	2.0
Glass containers	404.7	0.9	3.9
Gypsum products	341.4	-0.9	-5.7
Hand tools	391.5	0.9	2.6
Hand tools, power driven	242.6	0.0	3.5
Industrial furnaces	403.1	0.8	1.9
Integrating and measuring instruments	238.7	0.1	1.8
Internal combustion engines	360.6	1.9	3.3
Lubricating oil	352.1	3.6	-7.5
Lumber millwork	321.6	0.3	3.1
Material handling equipment	298.4	0.2	1.0
Metal containers	360.0	-0.4	-0.5
Metal mill shapes (nonferrous)	298.7	0.0	-2.6
Metal tanks	297.9	-0.5	-2.6
Motors and generators	352.8	0.2	0.7
Motor trucks	320.1	-1.3	4.0
Office and store equipment	156.9	0.1	2.0
Paperboard	290.2	1.5	9.2
Paper boxes and shipping containers	281.8	0.9	5.9
Paper office supplies	243.8	0.4	2.8
Paint	281.4	0.0	1.0
Plastic resins	290.1	-0.6	-4.1
Precision measuring tools	268.3	-0.6	0.6
Pumps and compressors	364.3	-0.1	1.1
Refractories	371.7	0.1	0.1
Rubber belts and belting	336.7	0.0	-0.8
Scales and balances	233.8	0.3	1.2
Steel products	351.9	0.1	1.8
Switchgear	287.2	0.3	1.3
Textiles, synthetic fibers	149.0	0.1	-1.7
Textiles, gray fabrics	150.7	0.5	-0.3
Tires and tubes	232.0	-0.3	-1.8
Transformers and power regulators	236.5	0.0	0.9
Welding equipment	303.6	0.3	1.6
Wire and cable	204.8	-0.3	-0.9



Source: Bureau of Labor Statistics

advances averaging at 0.2-0.3% a month, or about 2.5-3.5% at annual rate.

STEEL SCENE

Players slug it out in steel arena

Steel demand is beginning to pick up a bit, according to a majority of distributors responding to the latest Steel Service Center Institute (SSCI) survey. Nearly three out of five now see an increase in upcoming orders over the next three months—the largest such number in a year. And only 7% of survey respondents see declines

What's behind this slightly improved outlook? SSCI president, Andrew G. Sharkey, cites three key factors: 1) continuing strong auto production, 2) brisk first quarter public works construction due to an extremely mild winter, and 3) some new supply-related opportunities for service centers because of the recent USX strike.

Another factor mentioned by Sharkey is the relatively low level of inventories in the U.S. manufacturing system. This situation is tailor-made for service centers that can fill in the gaps almost immediately.

Moreover, distributors are not alone in projecting near-term gains. Thus 25% of buyers responding to the latest N.A.P.M. steel survey see increased purchases over the next three months.

The big question is whether or not this improvement will last. Sharkey isn't quite sure. He feels some slowdown could set in before too long in view of the modest outlook for big-ticket durables for the rest of 1987. Sharkey still looks for a small decline in overall SSCI member shipments for the year as a whole.

The SSCI survey also expresses some uncertainty about prices. While more than one out of three see some increases over the next six months, another 10% take the opposite view, saying that prices will soften slightly.

These differences of opinion are due to speculation about how USX production will affect the market in the next 3-6 months. While some feel an orderly reentry is likely, others still see another round of price cutting as mills slug it out for market share.

Several buyers point out that settlement of the USX work stoppage adds a 20% increase in supply potential. Products most affected include hot- and

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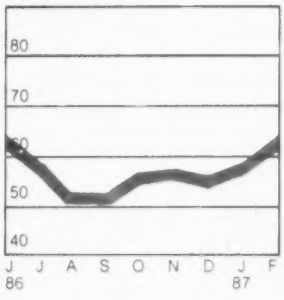
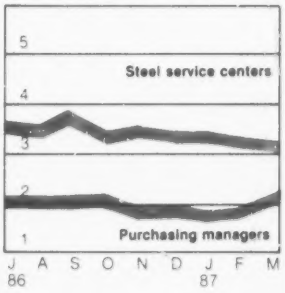
BUSINESS DATATRAK

Steel

Operating rates

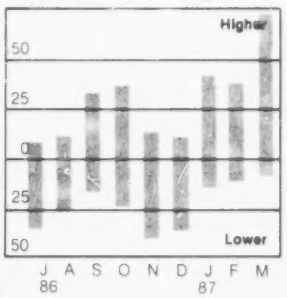


Inventories
(Months supply on hand)

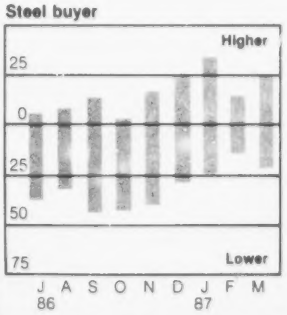


Demand
(Percent of respondents)

Service centers incoming orders



Steel buyer



cold-rolled sheet, hot-dip and electrogalvanized steel, special quality and alloy hot-rolled bar, tin mill products, structural shapes, and steel plate.

Nor do those looking for price softness ignore the effect of imports. While admitting that the softer dollar and quotas have resulted in some price firming, they add that it's still not enough to put steel imports on a par with domestic products.

The figures from the latest surveys would certainly seem to confirm this. Specifically, 28% of service center buyers report carbon steel imports under U.S. levels—versus just 2% at higher levels. And in stainless, the 80% noting import bargains is quite impressive—especially the fact that 20% put the price break in the 11-20% range.

The new surveys also present some additional findings on inventories—namely that despite the fact that stocks are low, both service centers and buyers are still thinking of further reductions.

On the distributor front, for example, 39% believe their stocks are too high (vs. 12% who say they are too low). The comparable figures for buyers: too high (39%) vs. too low (4%).

One reason for the "keep 'em trim" approach—aside from demand uncertainties: the lack of major supply problems. True, cold rolled and coated sheets are worrying a few buyers, but even here, concern is way down from late 1986.

Import prices
(Compared to domestic)

Steel buyers

ABOVE 25%
SAME 36%
SLIGHTLY BELOW 39%
SUBSTANTIALLY BELOW 0%

Service centers (carbon)

ABOVE 2%
SAME 70%
5-10% BELOW 26%
10-20% BELOW 2%
OVER 20% BELOW 0%

Source: Steel Service Center Institute, NAPM Steel Buyers Committee

PROCUREMENT STATUS

No problems—unless you want TiO_2

Chalk up another month of relative stability on the industrial procurement front.

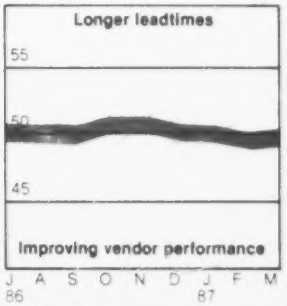
Products whose leadtimes have stretched out a bit are offset by others whose leadtimes have come in. So the overall averages remain unchanged. Further confirmation of overall steadiness comes from *PurchasingWorld*'s exclusive leadtime index which is again squarely on the neutral 50 mark.

The N.A.P.M.'s speed-of-delivery survey also suggests little dramatic change. The number reporting slowdowns (9%) is offset by the number noting improvement (7%). Contrast this to the previous month when the gap was significantly larger (8% slowdown vs. 4% speedup).

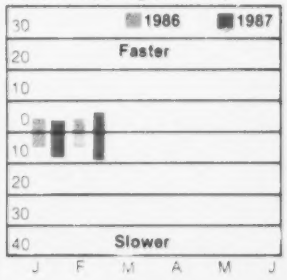
The only newsworthy trend is that industrial buyers finally seem to have ended their inventory

Monthly procurement status report

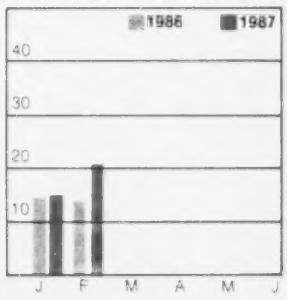
Leadtime index
A diffusion index based on 158 key commodities. Above 50 indicates a tendency for leadtimes to stretch out. Below 50 suggests improving vendor performance.



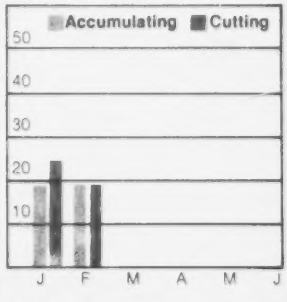
Delivery performance
(Percent reporting deliveries)



Forward commitments
(% committing 90 days or more in advance)



Inventory strategy
(Percent of respondents)



Source: NAPM

paring—at least temporarily. Over the past month, the 19% who reported cuts were equalled by another 19% who said they were accumulating. Contrast this to December 1986 when the 41% cutting overwhelmed the 12% who said they were adding.

PMs hasten to add that the change has very little to do with supply availability. They trace the shift to the fact that stocks can't go much lower—an appraisal that is confirmed by Uncle Sam's extremely low purchased materials stock/sales ratio.

But no one seems worried—17% of the purchasing executives surveyed continue to commit on a hand-to-mouth basis. This percentage has remained unchanged since last fall.

Perhaps the best indicator of today's problem-free climate comes from the fact that latest N.A.P.M. survey results show only one item in short supply—titanium dioxide. That's one less than last month when miscellaneous steel items were also on the snug list. Steel's disappearance from the list, of course, reflects the resumption of USX production.

There is nothing on the horizon to suggest any major problems. Even the threat of strikes is waning as unions remain on the defensive.

Leadtimes and availability

Chicago: C-r steel leads hold at 8 weeks—with plates and h-r bars at 4 and 6-7. Relatively stable are aluminum coil and sheet (12-14), aluminum bars and angles (6-8), batteries (10-14), capacitors (12-20), printed circuit boards (6-12), and semiconductors (16-20).

Cleveland: Slightly stretching out are steel canisters (to 2 weeks) and polyethylene resin (3). Remaining unchanged are PVC (2-3), paint (2-3), cold-finish aluminum (3), skids (1-3), and hardwood (2-3).

Los Angeles: These weekly delays are reported: galvanized steel (12-14), grey iron castings (4-5), brass castings (6-8), electro-mechanical devices (6-8), custom seals and gaskets (4-6), carbon steel coil (2), aluminum bar, sheet, and extrusions (2), and linear ICs (30).

Houston: Centrifugal compressors have moved out (to 10-13 months), as have boilers (5-11). Coming in (in months) are pumps (4-5), heavy wall reactors and converters (9-14), high pressure heat exchangers (4-7), cast steel valves (0-2), and structural steel (2-3).

Philadelphia: These weekly leads are reported: aluminum die castings (8-10), CMOS integrated circuits (on demand), large scale ICs and memory ICs (on demand to 8-10), and steel and bronze valves (5-6).

Pittsburgh: Reported weekly leads: multiwall bags (6), plastic bags (3-4), corrugated and folding boxes (3-4), drums (1), laminating papers (6-9), waterproof papers (8), plastic packaging materials (2-3), lumber (3-4), steel strapping (2-3), and paint (4-5).

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BUSINESS DATATRAK

Leadtimes (in weeks)

	Now	Month ago	Six months ago
STEEL			
Sheet (Phil)	4	4	4
C.R. Sheet (Chgo)	8	8	7½
Plate (Phil)	3½	3½	3½
Plate (Chgo)	4	4	3½
Reinforced (Hous)	6	6	6
H.R. Bars (Phil)	5½	5½	5½
H.R. Bars (Chgo)	6½	6½	4
Cold-Drawn Bars (Phil)	5½	5½	5½
Galvanized (LA)	13	13	13
Galvanized (Chgo)	12	12	6½
Structurals (Chgo)	4½	4½	4½
Structurals (Hous)	11	17	17
Tubing (Phil)	5½	5½	5½
Grey Iron Castings (LA)	4½	4½	7
Steel Castings (Hous)	11½	11½	11½
Forgings (Hous)	6	6	6
Pipe, Carbon (Hous)	17	17	17
ELECTRIC & ELECTRONIC			
Cables (Chgo)	8½	8½	8½
Capacitors (Chgo)	16	16	14½
Circuit Breakers (Chgo)	6	6	6
Electromech. Devices (LA)	7	7	7
ICs (Linear) (Phil)	4½	9	9
Motors (Phil)	9	9	9
Motors, 1000 hp & Up (Hous)	39	39	39
Printed Circuit Boards (Chgo)	9	9	9
Relays (Chgo)	15	15	15
Resistors (Chgo)	9	9	9
Resistors, Wirebound (Phil)	5	5	5
Transformers (Chgo)	10	10	10

	Now	Month ago	Six months ago
LUMBER			
Hardwood (Pgh)	3	3	3
Hardwood (Clev)	2½	2½	1½
Plywood (Chgo)	3	3	3
Plywood (Phil)	1½	1½	1½
Softwood (Clev)	2	2	2
Softwood (Phil)	3	3	3
Softwood (Pgh)	3	3	3
Particleboard (Phil)	2½	2½	2½
CHEMICALS-PLASTICS			
Adhesives (LA)	½	½	½
Naphthalene (Chgo)	2	2	2
Paint (LA)	4	4	4
Paint, Coil Coating (Pgh)	4	4	4
Paint, Maint. (Cleve)	2	2	2
Polyester Resin (LA)	2	2	2
Polyethylene Resin (Cleve)	3	2½	2
Polyethylene Resin (Pgh)	4	4	4
PVC Resin (Chgo)	2	2	2
PVC Resin (Pgh)	6	6	6
Titanium Dioxide (LA)	1	1	1
PACKAGING			
Bags, Kraft (Pgh)	5	5	5
Bags, Multiwall (Clev)	9	9	9
Bags, Multiwall (Pgh)	6	6	6
Cartons, Corrugated (Cleve)	2½	2½	2½
Cartons, Corrugated (Hous)	2	2	2
Cartons, Folding (Phil)	6½	6½	6½
Cartons, Folding (Pgh)	3½	3½	3½
Cellophane Wrap (Phil)	5	5	5
Plastic Bags (Pgh)	3½	3½	3½
Plastic Pkg. (Pgh)	3	3	3

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	Now	Month ago	Six months ago
Shrink Film (Chgo)	6	6	6
Shrink Film (Clev)	1	1	1
Drums, Fiber (Pgh)	1	1	1
Drums, Steel, Std. (Pgh)	1	1	1
Wood Pallets (Chgo)	2½	2½	2½
Wirebound Boxes (Pgh)	4½	4½	4½
Strapping (Clev)	1	1	1
Strapping (Pgh)	3	3	3
PAPER			
Fiberboard (Clev)	3½	3½	3½
Glassine (Clev)	4½	4½	4½
Glassine (Pgh)	5½	5½	5½
Groundwood (Clev)	4½	4½	4½
Groundwood (Pgh)	7	7	7
Kraft (Clev)	1	1	1
Kraft, Bleached (Clev)	1	1	1
Kraft, Bleached (Pgh)	5	5	5
Kraft, Natural MFNS (Clev)	½	½	1
Laminated (Clev)	8	8	8
Tissue (Pgh)	5½	5½	5½
NONFERROUS			
Aluminum Coil (Chgo)	13	13	11
Aluminum Plate (Chgo)	12	12	12
Aluminum Sheet (LA)	4½	4½	4½
Aluminum Sheet (Chgo)	13	13	11
Brass Castings (LA)	7	7	9
Brass Rods (Chgo)	9	9	9
Brass Sheet (Chgo)	5	5	5
Brass Tube (Chgo)	7	7	4
Copper Fittings (LA)	3½	3½	3½
Copper Mill Prod. (Pgh)	6	6	6

	Now	Month ago	Six months ago
Copper Tube (LA)	7	7	7
Copper Tube (Phil)	5½	5½	5½
Lead (Pgh)	2	2	2
Magnesium (Pgh)	2	2	2
Manganese (Clev)	1	1	1
Nickel (Clev)	1	1	1
Nickel (Pgh)	2	2	2
Silicon (Clev)	1	1	1
Tin (Pgh)	2	2	2
Wire, Specialty (LA)	5	5	5
Zinc (Pgh)	2	2	3
MISCELLANEOUS			
Bearings, Domestic (Phil)	2	2	2
Bearings, Foreign (Phil)	26	26	26
Boilers & Furnaces (Hous)	35	35	35
Compressors, Centrifugal (Hous)	50	48	48
Compressors, Reciproc. (Hous)	39	39	39
Fasteners (Chgo)	1½	1½	1½
Fasteners (LA)	7	7	7
Fasteners, Std. (Phil)	3	3	3
Heat Exchangers, Carbon-alloy Steel (Hous)	21	21	21
Heat Exchangers, Hi-pressure (Hous)	24	26	26
Insulation Mat'l. (LA)	7	7	7
Machined Parts (Hous)	9	9	9
Pipes & Valves (Chgo)	1½	1½	1½
Pumps (Hous)	19	24	24
Pumps (LA)	11	11	11
Rubber, Synthetic (LA)	2	2	2
Rubber Hose (LA)	4	4	4
Tungsten Carbide Parts (Hous)	15	15	15
Valves, Cast Steel (Hous)	4	17	17
Welding Supplies (Hous)	5	5	5

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BUSINESS DATATRAK

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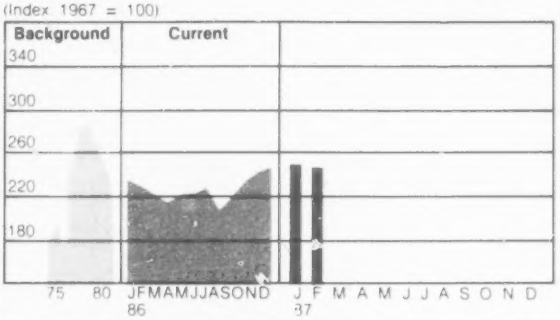
Latest month 247.2
Month before 252.8
Year ago 233.3

(Index: 1967 = 100)



Latest spot market prices

	Latest price	Previous month	Year ago
FERROUS METALS			
Pig iron, basic, valley, gross ton	213.00	213.00	213.00
Pig iron, Bessemer, Pitts., gross ton	213.00	213.00	213.00
Steel, billets, Pitts., net ton	367.00	367.00	367.00
Steel, structural shapes, Pitts., cwt.	23.90	23.90	23.90
Steel, structural shapes, Chi., cwt.	23.90	23.90	23.90
Steel, structural shapes, Los Angeles, cwt	23.90	23.90	23.90
Steel, bars, dlvd. Phila., cwt., merchant quality	15.70	23.95	23.95
Steel, bars, Pitts., cwt.	15.70	23.95	23.95
Steel, bars, C.R., Pitts., cwt.	19.45	31.00	31.00
Steel, plates, Pitts., cwt.	18.25	18.25	18.25
Steel, plates, H.R., Pitts., cwt.	18.25	18.25	18.25
Steel, sheets, C.R., Detroit, cwt.	26.90	26.90	25.15
Steel, strip, C.R., Chi., cwt.	36.18	36.18	36.18
Steel, basic wire, Pitts., cwt.	23.65	23.65	23.65
NONFERROUS METALS			
Aluminum, ingot, lb. (market place)	.625	.570	.590
Antimony, N.Y., dealer, lb.	1.08	1.03	1.32
Beryllium-copper, cost ingot, lb.	5.65	5.65	5.35
Brass, red, 85%, [sheet], lb.	1.31	1.29	1.32
Brass, yellow, [sheet], lb.	1.26	1.24	1.27
Cadmium, N.Y., dealer, lb.	0.95	0.95	1.15
Copper, electrolytic, wire bars, refd., lb.	.67	.65	.68
Copper sheet, over 24 in., lb.	1.40	1.38	1.41
Lead, common, N.Y., lb.	.26	.26	.18
Magnesium, pig ingot, [99.8%], lb.	1.53	1.53	1.53
Mercury, 20 fl. lots, N.Y., fl.	235.00	210.00	240.00
Molybdenum, oxide, dealer, lb.	3.10	3.07	2.75
Nickel, cathode, dealer, lb.	1.78	1.70	1.90
Platinum, dealer, oz.	525.00	524.00	403.00
Silver, N.Y., oz.	5.51	5.54	5.56
Tin, N.Y., dealer, lb.	3.13	3.17	4.55
Zinc, Prime West, East St. Louis, lb.	.38	.38	.34
Zinc, die casting alloy, No. 3, lb.	.445	.465	.415
PAPER			
Uncoated book #3 offset, ton	860.00	860.00	850.00
Watermarked bond, ton	985.00	935.00	985.00
Gummed sealing tape, carton	16.53	16.29	16.35
Shipping sacks, ton	390.00	390.00	390.00
Solid bleached paperboard, ton	620.00	620.00	550.00
Kraft linerboard, 42 lb., unbleached, ton	350.00	330.00	290.00
TEXTILES			
Burlap, 10 oz., 40", N.Y., yd.	.230	.238	.222
Cotton drill, 1.85, 59", 68x49, N.Y., yd.	1.080	1.085	1.045
Cotton middling, 1", N.Y., lb.	.540	.530	.620
Printcloth, 48", 80x80, N.Y., spot, yd.	1.00	.95	.64
Army duck, 37", 13 oz., yd.	1.405	1.405	1.480
Blended printcloth, 64", 78x54, yd.	.83	.82	.73
20s combed yarns	1.77	1.77	2.05
Wool 64s, Staple, lb.	2.12	2.00	2.00
CHEMICALS			
Acrylonitrile, tanks, lb.	.395	.395	.395
Ammonia, anhydrous, tankcars, Gulf Coast, ton	80.00	80.00	N.A.
Benzene, petroleum, tanks, Houston, gal.	1.58	1.20	.93
Caustic soda, 76% solid, drums, carlots, cwt.	26.00	26.00	26.00
Cresylic acid [over 25%], tanks, lb.	.58	.58	.58
Formaldehyde, USP, 37%, [12% to 15% meth.], tanks, lb.	.106	.106	.106
Glycerine, synthetic, tanks, lb.	.91	.91	.91
Methanol, shy., tanks, 4,000 gals, f.o.b. Gulf Coast plants	.28	.28	N.A.
Naphthalene, crude, tanks, lb.	.22	.22	.22
Phthalic anhydride, tanks, lb.	.27	.27	.27
Polyethylene resin, low density liner film grade (market place), lb.	.285	.290	.320
Polypropylene, homopolymer grade (market price), lb.	.350	.345	.360
Polystyrene, general purpose grade (market price), lb.	.39	.39	.35
Polyvinyl chloride, pipe grade (market price), lb.	.315	.305	.290
Soda ash, 58%, light carlots, cwt.	6.15	6.15	6.15
Styrene monomer, 99.6%, tanks, lb.	.33	.26	.26
Sulphur, crude, ex-terminal, Tampa, Fla., lt.	152.50	152.50	157.50
Sulphuric acid, 66%, commercial, tanks, ton	66.86	66.86	66.86
Titanium dioxide, anatase, reg, carlots, lb.	.77	.77	.73
Xylene, tanks, gal.	.795	.765	1.36
BUILDING MATERIALS			
Lumber, 2x4, fir, mbf, cl.	327.30	322.90	305.20
Lumber, 2x2, pine, mbf, cl.	322.05	314.40	296.65
Plywood, plyform, ⅜", msf, cl.	566.45	585.05	566.55
Plywood, ½", msf, cl.	381.90	384.90	375.05
Cement, bulk, ton, lt.	63.25	63.28	66.07
Sand, ton, cl.	6.82	6.70	6.42
Ready-mix concrete, 3,000 psi/cu. yd., 15 cu. yd.	48.15	48.07	48.21
Crushed stone, 1½", ton, cl.	8.08	8.08	7.84
Concrete blocks, sand/gravel, 8"x8"x16", ea., lt.	0.84	0.84	0.82
Gypsum sheathing, ½"x1"x8", msf, lt.	207.84	213.52	210.17
Brick, common, per thousand, lt.	188.10	186.96	185.71
Asphalt paving, AC-20	124.66	124.05	172.31
Concrete sewer pipe, 12", prem. joint, per foot, cl.	7.37	7.36	7.07
FUELS			
Fuel oil, No. 6 or Bunker C, Gulf, bbl.	14.00	14.75	12.25
Fuel oil, No. 6 or Bunker C, N.Y., barge, bbl., reseller	17.50	20.75	19.00
Gasoline, 91 oct., reg., Los Angeles, rack, gal.	.520	.585	.455
Gasoline, 94 oct., reg., Chi., tank car, gal.	.518	.510	.398
Heating oil, No. 2, Chi., bulk, gal.	.483	.488	.440
Heating oil, No. 2, N.Y., bulk, gal.	.450	.498	.605
Heavy fuel, PS 400, Los Angeles, rack, bbl.	26.50	26.50	26.50
Jet kerosene, gal.	.475	.478	.468
LP-Gas, propane, Okla., tank cars, gal. [incl. discount]	.245	.245	.330
SCRAP MATERIALS			
Steel, No. 1, hvy., dlvd., Pitts., ton	80.00	83.00	74.00
Steel, No. 1 hvy., dlvd., Chi., ton	73.00	77.00	73.00
Copper, No. 1, East, wholesale buy, dlvd., lb.	.580	.555	.605
Copper, No. 2, East, wholesale buy, dlvd., lb.	.500	.480	.525
Brass, red, East, wholesale buy, dlvd., lb.	.540	.515	.565
Brass, yellow, East, wholesale buy, dlvd., lb.	.330	.330	.300
Alum., old sheet/cast, E., wholesale buy, dlvd., lb.	.385	.355	.375
Alum., mixed clip, E., wholesale buy, dlvd., lb.	.420	.380	.400
Zinc, old, East, wholesale buy, dlvd., lb.	.200	.200	.150
Lead, clean solids, East, wholesale buy, dlvd., lb.	.155	.155	.100
Paper, No. 1 mixed, dlr., N.Y., ton	Nom.	Nom.	Nom.
Paper, old corrug. box, dlr., Chi., ton	25.00	28.00	10.00
Paper, old corrug. box, dlr., N.Y., ton	15.00	22.00	10.00
Osnaburg cuttings, dlr., f.o.b. N.Y., lb.	.120	.090	.110
White wipers, No. 1, dlr. buy, f.o.b. N.Y., lb.	.120	.110	.130

[Sources: Metals Week, Engineering News-Record (20-city averages), Platt's Oilgram Price Service.]

Office market is fair game for bargain hunters

Robert S. Reichard, executive editor

If you can't cut a deal in office equipment and supplies today, then you really aren't trying.

In most cases there's more than enough equipment and sources to go around, and vendors are scrambling to get a piece of the action. And while some marginal increase in transaction price averages is possible, weakness again should prevail in some of the more hotly competitive high-tech sectors.

This scenario is painted by the majority of purchasing managers responding to a new *Purchasing World* nationwide buying survey. These respondents feel that this will be taking place at a time of rising demand—especially in computers, telecommunications, and office copiers.

Nor are buyers alone in this latter demand assessment. Industry leaders are telling the same story. The Computer and Business Equipment Manufacturers Association (CBEMA) is projecting shipment gains in almost all key areas—not only for 1987 but for the next few years as well.

But buyers will still have their share of headaches. Rapidly changing technology in high-tech areas will continue to make many purchasing decisions difficult. Buyers must also work to avoid obsolescence while also aiming for standardization of equipment and supplies. Prices will also vary—some fair-sized increases are possible in the office supplies and office furniture areas.

By and large, survey respondents are confident that they can live with these pressures. Here's how they see the basic 1987 procurement picture shaping up:

■ **1987 demand trends:** Modest gains are suggested by the fact that an impressive 48% of the responding buyers anticipate an increase in purchases. That should be enough to push 1987 totals into the plus column—only 33% see declines and the remaining 19% expect little change.

Biggest dollar outlays are being earmarked for computers—with telecommunications equipment and copiers following close behind. One big computer buyer who has carefully studied this market estimates that industry-wide personal computer sales could jump as much as 25% this year.

On the other hand, increases in purchases of office supplies are expected to be just slightly above the general economic growth rate. This is confirmed by a recent Commerce Department study which suggests that overall business forms demand will increase only about 4-5% this year.

■ **1987 price trends:** The average advance should be only about 1%—not much different from last year when a fractional decline was indicated. And not everyone will be affected. Thus 22% of the respondents feel that they can still do better than last year by pressing for bigger price cuts or by settling for smaller price boosts.

Another 41% of the buyers surveyed see very little change in 1987 price patterns. Add these to the 22% expecting to improve on 1986's performance, and it suggests that two out of every three PMs should do as well, if not better, than last year.

■ **A closer look at 1987 prices:** As indicated earlier, there could be wide variation depending on the product. Generally speaking, the more high-tech the product line, the greater the likelihood of price declines (see accompanying chart). Four out of five respondents now anticipate declines in personal computer quotes this year. Equally impressive figures are posted for PC software (59%), printers (50%), other computer peripherals (46%), and electronic typewriters (52%).

Copiers, too, are expected to exhibit some price softness. Specifically, the 30% anticipating lower tags offsets the 12% who are bracing for increases. The remaining 58% see little overall change. The outlook for telecommunications equipment prices isn't bad either. Those who expect boosts almost completely offset those hoping for more declines.

Prices of more traditional items are expected to rise a bit. In the office furniture sector, for example, the 52% who are reconciled to increases overwhelms the small 12% who are looking for 1987 declines. Similarly, 36% of the queried buyers anticipate price hikes in office supplies--double the 16% who are still hoping for decreases.

■ **The role of purchasing:** Most buyers report that they are playing an increasingly important role in the procurement of sophisticated equipment. Some 70% say they are now part of a selection team and another 15% say they are the primary decisionmakers.

The increasing role of the purchasing professional makes good sense. Rapidly changing technology and the bewildering number of systems on the market make it almost mandatory that procurement of computers and other advanced electronic equipment be thoroughly researched and coordinated. In the words of one survey respondent, "What better place for this than the purchasing department?"

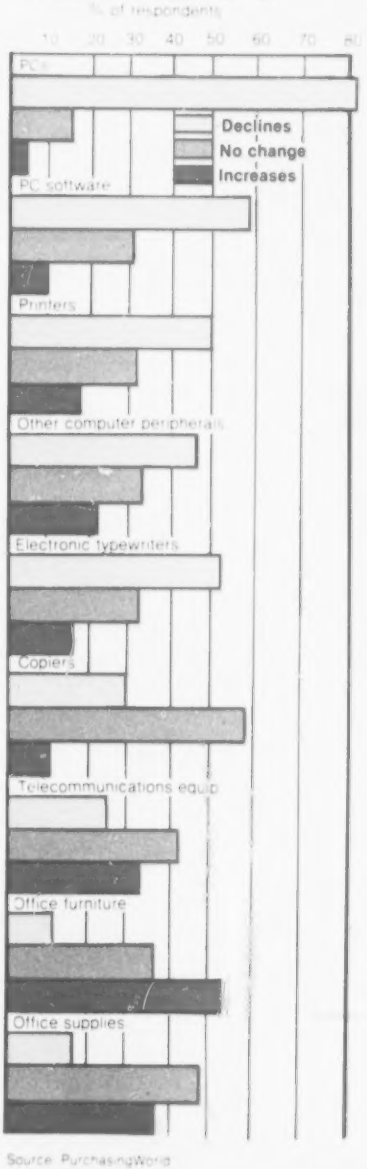
Those involved in buying office supplies and equipment must also develop strategies for 1) servicing of equipment, 2) making sure that purchased equipment is meeting a company's needs and lives up to manufacturer's claims, 3) gauging the lag between new hardware and software, and 4) deciding whether to handle data processing in or out of house. Office buyers must also track pricing and market trends constantly. One buyer who checks computer prices weekly says, "You never know what you are going to pay for the same PC from week to week or vendor to vendor."

Shoddy workmanship is another complaint voiced by a few respon-

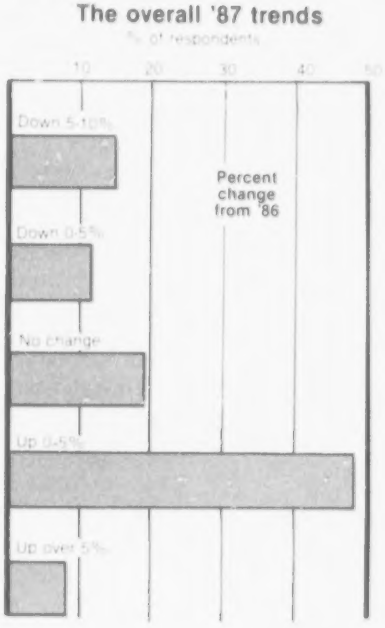
Office Equipment & Supplies

A buyer's view of prices

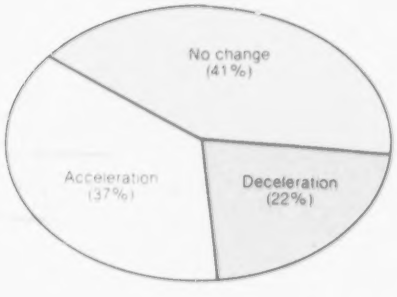
A detailed look for '87



The overall '87 trends



'87 Versus '86



Source: PurchasingWorld

dents. Their claim is that products are being made of cheaper materials in order to keep costs down. This, in turn, has raised concern over servicing. A PM for a large Southern bank keeps a log on all equipment which includes all service calls, service contract expiration dates, warranties, etc. He then reviews the log to decide which equipment to buy, which to keep under service contract, etc.

Purchasing pros are relying on some tried and true techniques such as value analysis, competitive bidding, and multi-vendor interviews. One buyer offers these simple steps when making a big ticket office buy:

- Don't rush the buy. Keep the ultimate user involved all the way.
- Use requests for information to get all the facts.
- Schedule vendor presentations to supplement information.
- Narrow alternative solutions.
- Make the final decision, using generic performance specifications.
- Observe the equipment working somewhere else before you buy.
- Check all vendor references.

Office equipment demand reaches new heights

Business equipment manufacturers are setting their 1987 sights high—looking for demand gains in virtually every single key segment of the industry except mainframe computers.

Their thinking, reflected in forecasts by the Computer and Business Equipment Manufacturers Association (CBEMA), suggests that total dollar sales (computers, other business equipment, software, and services) will hit a peak $377 billion this year.

Many of the new projections which are given in unit as well as dollar terms (see chart) also suggest relatively soft prices. Divide unit projections into dollar amounts and declines in average 1987 purchase prices are indicated for microcomputers, general display terminals, printers, electronic calculators, copiers, and electronic typewriters.

There are some small unit price increases implied for mainframe computers and facsimile machines. But this is probably due to the upgrading of product mix.

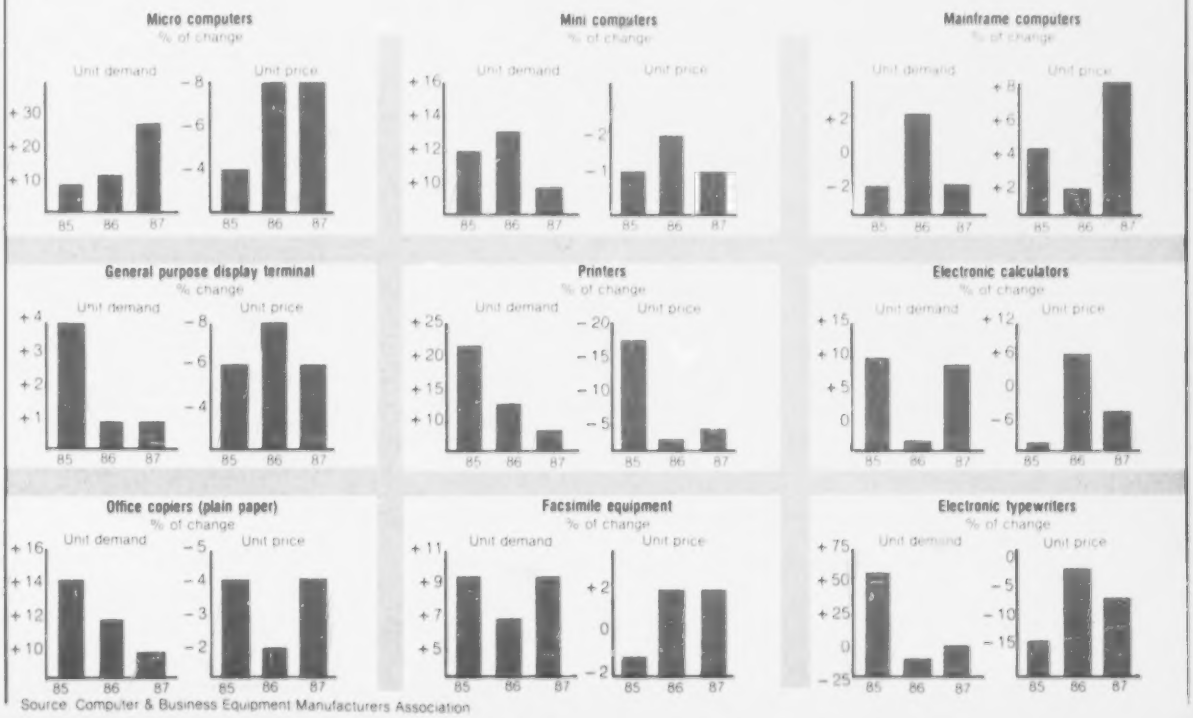
CBEMA's estimates for 1990 paint much the same picture. Gains are anticipated in all sectors except mainframe computers and electronic typewriters. The fall-off in the latter area is attributed to the gradual replacement of these machines with PCs.

The falling price trends noted for 1987 are also expected to continue over this longer time span. By 1990, for example, the average business personal computer should be selling for only $2,242.

Other impressive unit price declines over this 3-year period are projected for general purpose display terminals (-21%), electronic typewriters (-23%), copiers (-11%), and electronic calculators (-8%).

1987 office equipment trends

A vendor perspective



Source: Computer & Business Equipment Manufacturers Association

Gear up for accelerating inflation

A slight increase in the overall inflation rate is projected by analysts at Data Resources Inc. (DRI), a Cambridge, MA consulting firm. They expect a 1.6% boost in industrial commodity tags this year vs. a 3.7% drop last year. Further acceleration to 4.4% and 3.8% is anticipated for 1988 and 1989.

Similar acceleration is seen for other key price measures. The GNP implicit deflater is expected to hold at an increase of 2.7% for 1987. But by next year and 1989, the increases are projected to accelerate to 3.4% and 3.8%.

A look at individual product price trends (provided every three months by DRI for *PurchasingWorld*) tells the same story. Increases over the next 12 months will be a bit stiffer than those suggested just three months earlier.

Factors cited for the steeper rates of gain include higher oil quotes, the weaker dollar, and slightly larger boosts in wage rates. On the latter score, DRI sees the employment cost index for private industry wages and salaries moving up 3.9% this year vs. 3.6% in 1986—and higher rates of 4.0% and 4.5% are expected in 1988 and 1989.

All these factors suggest the following product-by-product price patterns over the next few years:

■ **Energy:** Warmer spring weather and higher non-OPEC output, combined with inventory drawdowns, will push oil tags slightly lower this quarter. But by midyear, markets should become firmer and first quarter 1988 crude oil should hit $17/barrel. And the advance will continue to over $19/barrel by the end of 1989.

■ **Chemicals:** A rebound in feedstock costs and a healthy end-market demand pattern will lead to higher price boosts. Industrial chemicals, which fell 4.7% in 1986, will move up 1.2% in 1987, 5.1% in 1988, and 2.8% in 1989.

Prices: A 2-year look ahead
(comparison of 2nd quarter pricing)

Product	Percent changed 88/87	89/88
Raw materials, energy		
Gasoline	12.5	4.2
Industrial chemicals	4.4	2.5
Intermediate materials, less food	4.0	3.9
Metals		
Steel mill products	4.3	4.4
Carbon steel plates	4.0	4.8
Steel, hv. structural shapes	5.9	3.7
Primary aluminum, ex billet	4.0	5.1
Domestic copper cathode	2.2	5.4
Secondary nonferrous metals	3.2	4.7
Lead, pig, common	2.6	3.3
Aluminum shapes	5.3	5.5
Components		
Truck tires	3.0	2.7
Laminated plastic sheets	3.4	3.5
Corrugated containers	4.3	3.7
Foundry & forge shop products	6.1	3.8
Hardware	4.2	3.6
Electronic components	4.2	6.5
Machine shop products	3.7	5.6
Construction products		
Prepared paint	3.6	3.3
Wiring devices	4.8	5.1
Flat glass	4.1	3.3
Machinery		
Construction equipment	4.9	5.5
General purpose machinery	3.8	4.1
Durable manufacturing	3.9	4.3
Trucks over 10,000 lb.	4.9	5.1

Source: Data Resources, Inc. Cost Forecasting Services

■ **Nonferrous metals:** Import pressure will hold down price boosts. The aggregate producer price index for primary nonprecious nonferrous metal will rise only 0.7% per quarter this year, 1.2% per quarter in 1988, and 1.0% per quarter in 1989. But by late 1989, prices will be running about 13% ahead of late 1986 levels.

■ **Steel:** Prices are expected to soften over the next few months as USX production hits the market again and poor demand conditions persist. But next year, as the economy enjoys strong, export-led growth and producer costs rise, more substantial boosts are expected. DRI's forecasts for mill products: +1.6% in 1987, +4.3% in 1988, and +4.5% in 1989.

■ **Construction materials:** Boosts in fabricated structural metal tags will remain small—2.4%, 2.9%, and 3.6% for 1987, 1988, and 1989 respectively. But oil-based items will move up much faster. Example: Bituminous paving materials, after falling 5.9% this year, could advance 4.2% in 1988 and 7.3% in 1989.

■ **Machinery and equipment:** Some acceleration is expected next year as demand begins to improve. DRI forecasts the following increases in metal-forming machine tool prices: 3.0% in 1987, 5.5% in 1988, and 5.7% in 1989. The aggregate machinery and equipment index, which rose only 1.5% in 1986, is forecasted to move up 2.1% in 1987, 4.2% in 1988, and 4.8% in 1989.

■ **Electronic components:** A stronger market is seen as 1) personal computer sales rise, 2) Japanese competitors are forced to raise prices in the wake of recent trade agreements, and 3) chip inventories are drawn down. DRI forecasts an average annual increase of 3.8% over the 1987-89 period.

DRI is also making some long-term price projections (through 2000). Some of the average annual rates of increase anticipated over this period: nonferrous metals (+5.7%), steel (+5.2%), steel-based construction materials (+4.7%), oil-based construction materials (+9.4%), and machinery and equipment (+5.6%). **PW**